

REMARKS

The Examiner's Action mailed on June 4, 2003 has been received and its contents carefully considered.

In this Amendment, Applicants have amended the specification and claims 1, 2 and 6. Further, claim 19 has been added to the application. Claims 1, 7 and 19 are the independent claims. Claims 1-19 are pending in the application. For at least the following reasons, it is submitted that this application is in condition for allowance.

The Examiner has objected to the specification for not providing antecedent basis for the subject matter recited in claim 9. In response thereto, the specification has been amended to ensure antecedent basis has been provided for the subject matter recited in all of the claims. It is requested that this objection be withdrawn.

The Examiner has objected to the amendment filed March 19, 2003 for introducing new matter. Moreover, the Examiner has rejected claim 17 for failing to comply with the written description requirement of 35 USC Section 112. The Examiner's Action states that the display panel being coated with a lacquer is not disclosed in the original specification. However, the Examiner's attention is respectfully directed to original claim 6, which recites that the display panel is coated with lacquer. As such, the amendment filed on March 19, 2003 did not introduce new matter. Further, claim 17 fully complied with the provisions of Section 112. It is thus requested that this objection and rejection be withdrawn.

AMENDMENT

09/910,762

The Examiner has objected to claim 1 for an informality. In response thereto, claim 1 has been amended to correct this informality. It is requested that this objection be withdrawn.

The Examiner has rejected claims 1-7, 10-15, 17 and 18 as being obvious in view of *Johnson et al.* (USP 6,439,731). It is submitted that these claims are patentably distinguishable over the cited reference for at least the following reasons.

Applicants' independent claim 1 is directed to a display module including a plurality of light emitting elements, a metal plate, a circuit board and a display panel. The light emitting elements are directly adhered to the metal plate. Moreover, the metal plate is arranged to be perpendicular to the display module, with the metal plate and the display module collectively forming a T shape.

As disclosed by Applicants' specification, since the light emitting elements are directed bounded to the metal plate, excellent heat dissipation will result (see page 4, lines 9 and 10). Moreover, since the metal plate and the display module collectively form a T shape, the metal plate functions as a shade, to allow the display to be viewed even in direct sunlight (see page 4, line 11). This claimed configuration, nor the advantages associated therewith, are neither disclosed or suggested by the cited reference.

Johnson et al. disclose a device for backlighting a liquid crystal display (LCD) panel 18 using an array of light emitting diodes (LEDs) 12 mounted in a

cavity formed in an optical chamber 16, and behind the LCD panel 18. The device further includes a printed circuit board (PCB) 10 having the LEDs 12 disposed on one surface thereof. A heat sink plate 22 is disposed adjacent to another surface of the PCB 10.

However, and in contrast to the present invention, the cited reference does not disclose or suggest that the LEDs 12 are directly adhered to the plate 22, as would be required by claim 1. In fact, the LEDs are separated from the plate 22 by the PCB 10, which would appear to prevent such adhesion.

Moreover, the plate 22 is not arranged to be perpendicular to the optical chamber 16, as required by claim 1. Instead, the plate is arranged to be parallel to the optical chamber. Further, the plate 22 and the optical chamber 16 do not collectively form a T shape, as required by claim 1. As such, it is submitted that independent claim 1, and the claims dependent therefrom, are *prima facie* patentably distinguishable over *Johnson et al.* It is thus requested that at least this portion of the rejection be withdrawn, and that these claims be allowed.

Claim 7 is submitted to be patentably distinguishable over the cited reference for at least the following reasons. Claim 7 recites that the display module includes a display panel having two primary surfaces and four lateral sides. A plate is provided that has an extension portion to shield at least one of the primary surfaces.

Initially, it is noted that the Examiner's Action has not addressed the feature of the extension portion of the plate. It is believed that the reason for this omission

is because the cited reference does not disclose or suggest this feature. That is, there are no features of the plate 22 that could be construed as an extension portion, much less an extension portion that shields at least one of the primary surfaces of the chamber 16.

It is further noted that the chamber 16 does not include two primary surfaces, as required by claim 7. Instead, and even assuming that the LCD panel 18 could be construed as one of the primary surfaces of the chamber 16, it is noted that the other side of the chamber 16 is open to allow the PCB 10 to be fit therein.

Further, it is noted that the cited reference does not disclose or suggest a plurality of light emitting elements mounted on plate 22, as would be required by claim 7. Instead, the reference teaches that the LEDs 12 are mounted to the PCB 12.

As such, it is submitted that independent claim 7, and the claims dependent therefrom, are *prima facie* patentably distinguishable over *Johnson et al.* It is thus requested that at least this portion of the rejection be withdrawn, and that these claims be allowed.

Further, it is submitted that claim 18 is further patentably distinguishable over the cited reference for at least the following additional reason.

Claim 18 recites that the display panel has one of a light-blocking and a light-reflecting tape adhered thereto. The Examiner's Action has not even addressed this feature. Moreover, since the cited reference does not disclose or

suggest that the chamber 16 has one of a light-blocking and a light-reflecting tape adhered thereto, it is submitted that the Examiner's Action has failed to establish a *prima facie* case of obviousness against this claim. It is requested that this claim be allowed.

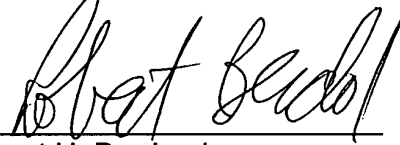
The Examiner's Action has also rejected claims 9 and 16 as being obvious over *Johnson et al.* in view of *Hochstein* (USP 6,428,189). Because *Hochstein* does not overcome the above-noted deficiencies of *Johnson et al.*, it is submitted that claims 9 and 16 are patentably distinguishable over the cited combination of references for at least the same reasons as independent claim 7, from which these claims depend, as well as for the additional features recited therein. It is requested that these claims be allowed, and that this rejection be withdrawn.

Claim 19 has also been added to the application, and is submitted to be patentably distinguishable over the cited references, either taken alone or in combination, for at least the following reasons. Claim 19 recites that the display module includes a thermally conductive plate having a central portion mounted on a circuit board, and having extension portions that extend past respective primary surfaces of the display panel to provide a sun shield for the primary surfaces. Further, the heat conductive plate and the display panel collectively form a T-shape. Additionally, a plurality of light emitting elements are directly bounded to the plate. In contrast, none of the cited references disclose or suggest this combination of features. It is requested that this claim be allowed.

It is submitted that this application is in condition for allowance. Such action, and the passing of this case to issue are requested.

Should the Examiner feel that a conference would help to expedite the prosecution of the application, the Examiner is hereby invited to contact the undersigned counsel to arrange for such an interview.

Respectfully submitted,



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Date

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